

November 03, 2017



Town Plan and Zoning Commission
Town of West Hartford
50 South Main Street
West Hartford, CT 06107

Re: 975 North Main Street
William H. Hall High School
Special Use Permit #1314
Planning Division Review Comments – Review Updates

Dear Town Plan and Zoning Commission:

On behalf of the Town of West Hartford - West Hartford Public Schools (Applicant) and their Owner's Project Manager, Construction Solutions Group (CSG), JCJ Architecture (JCJ) offers the following response to updated plan review comments issued by Catherine Dorau, Associate Planner, Town of West Hartford via an electronic message dated November 02, 2017 after their review of the plan set title: "William H. Hall High School Science Classroom Project, 975 North Main Street, West Hartford, CT 06107, State Project No. 155-0240 EA for the Town of West Hartford, Connecticut – Issued for Regulatory Submission – Special Use Permit 10/27/2017" (Project).

Plan Review comments issued by Catherine Dorau, Associate Planner, Town of West Hartford:

1. Sheet G-004 was not included in the set.

Response: *Sheets G-003 and G-004 were combined into a single sheet, G-003.*

2. The lighting for the 30 space bus/car parking area should be shown on the plan and detailed.

Response: *Refer to enclosed light fixture cutsheets. Site lighting layout plan will be available for the Monday, November 06, 2017 public hearing.*

3. A detail of the retaining wall should be on the plans.

Response: *Sheets L-104 and L-502 have been revised to include the segmental retaining wall plans and details. Refer to enclosed sample product data sheet.*

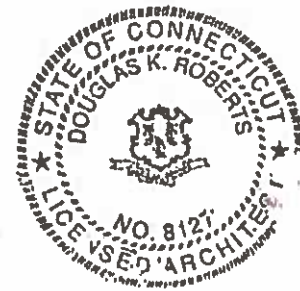
End of response.

Please contact our office with any questions.

Respectfully submitted,



Douglas K. Roberts, AIA
Principal / Managing Director



cc: Dr. Andrew Morrow, Assistant Superintendent, WHPS
Robert Palmer, Director of Plants and Facilities, ToWH - WHPS
Christopher Cykley, Project Executive, Construction Solutions Group, LLC
Michael A. Cegan, ASLA, APA, Richter & Cegan, Inc.
Herbert S. May, P.E., Macchi Engineers, LLC
James W. Hoagland, AIA, JCJ
Project File H16054.00 / 24

Attachments

ALED5S78N/D10/LC

RAB
LIGHTING



High output LED pole top area light with IES type V square distribution. Wide and uniform 360 degree pattern ideal for large outdoor areas such as parking lots, corporate parks, and retail settings. Includes built in support for Lightcloud, a wireless lighting control system and service, fully developed by RAB.

Color: Bronze

Weight: 35.5 lbs

Project:
Hall High School

Type:
A

Prepared By:
A. Murphy

Date:
05/03/17

Driver Info

Type:	Constant Current
120V:	0.60A
208V:	0.372A
240V:	0.322A
277V:	0.276A
Input Watts:	71W
Efficiency:	N/A

LED Info

Watts:	78W
Color Temp:	4000K
Color Accuracy:	73 CRI
L70 Lifespan:	100000
Lumens:	8,183
Efficacy:	114 LPW

Technical Specifications

Lightcloud

Lightcloud Installed:

Lightcloud is a commercial wireless lighting control system and service fully developed and supported by RAB. It's powerful and flexible, yet easy to use and install.

Listings

UL Listing:

Suitable for wet locations.

Dark Sky Approved:

The International Dark Sky Association has approved this product as a full cutoff, fully shielded luminaire.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

LED Characteristics

LEDs:

Long-life, high-efficiency surface mounting LEDs

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2015.

Electrical

Driver:

Constant Current, Class 2 with 4kV surge protection, 120-277VAC, 50/60 Hz, 120V: 0.60A, 208V: 0.372A, 240V: 0.322A, 277V: 0.276A

THD:

7.8% at 120V, 14.5% at 277V

Power Factor:

99.5% at 120V, 92.4% at 277V

ALED5S78 with Dimmable Drive:

Driver includes dimming control for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims as low as 10%.

Optical

BUG Rating:

B3 U1 G2

Optics:

Square, Type V distribution

Construction

Cold Weather Starting:

Minimum starting temperature is -40° F (-40° C)

Maximum Ambient Temperature:

Suitable for use in 104° F (40°C) ambient temperatures

Thermal Management:

Superior thermal management with external air-flow fins

For use on LEED Buildings:

IDA Dark Sky Approval means that this fixture can be used to achieve LEED Credits for Light Pollution Reduction.

Effective Projected Area:

EPA = 0.7

Housing:

Precision die-cast aluminum

Lens:

Clear polycarbonate

Reflector:

Vacuum-metalized polycarbonate

Gaskets:

High-temperature silicone

Mounting:

Tenon for 2 3/8" or 3" OD post or pole-top adaptor

Finish:

Formulated for high-durability and long lasting color.

Technical Specifications (continued)

Construction

Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

Other

Patents:

The designs of the ALED5S are protected by patents pending in US, Canada, China, Taiwan and Mexico.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods—Buy American Act—Construction Materials (October 2010).

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

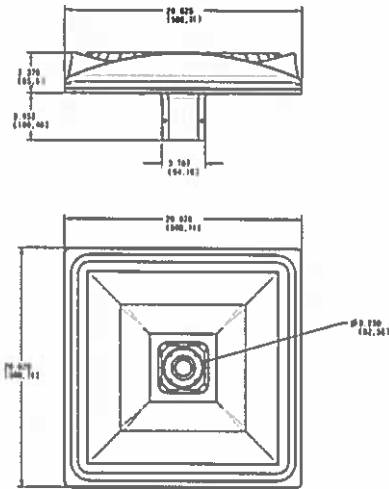
Replacement:

Replaces 150 Watt Pulse MH / 250 Watt Probe Metal Halide.

ALED5S78N/D10/LC



Dimensions



Features

Precision optics deliver uniform, optimal light distribution

Perfect for parking lots and pathways

100,000-Hour LED lifespan

Built in support Lightcloud™

Easy setup - simply power on, confirm device connectivity and call 844-LIGHTCLOUD

Ordering Matrix

Family	Distribution	Shape	Watts	Color Temp	Finish	Dimming	Lightcloud
ALED	5	S	78	N		/D10	/LC
	5 = Type V	S = Square	78 = 78W 150 = 150W	Blank = 5000K (Cool) N = 4000K (Neutral) Y = 3000K (Warm)	Blank = Bronze W = White	/D10 = Dimmable	/LC = Lightcloud



12, 18 and 26 Watt SLIM wallpacks are ultra efficient and deliver impressive light distribution with a compact low-profile design that's super easy to install as a downlight or uplight.

Color: Bronze

Weight: 4.5 lbs

Project:
Hall High School

Type:
G

Prepared By:
A. Murphy

Date:
05/03/17

Driver Info

Type:	Constant Current
120V:	0.18A
208V:	0.11A
240V:	0.09A
277V:	0.08A
Input Watts:	21W
Efficiency:	85%

LED Info

Watts:	18W
Color Temp:	4000K
Color Accuracy:	70 CRI
L70 Lifespan:	100000
Lumens:	2,528
Efficacy:	120 LPW

Technical Specifications

Electrical

Dimming Driver:

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims as low as 10%.

Driver:

Constant Current, Class 2 100-277V, 50/60 Hz., 4KV surge protection, 500mA, 100-240VAC 0.3-0.15 Amps, 277VAC 0.15 Amps, Power Factor 99%.

Listings

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities.

DLC Product Code: PAKQXTZY

UL Listing:

Suitable for wet locations. Suitable for mounting within 1.2m (4ft) of the ground.

ADA Compliant:

SLIM™ is ADA Compliant.

Dark Sky Approved:

The International Dark Sky Association has approved this product as a full cutoff, fully shielded luminaire.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

Construction

IP Rating:

Ingress Protection rating of IP66 for dust and water

Cold Weather Starting:

Minimum starting temperature is -40° F (-40° C)

Maximum Ambient Temperature:

Suitable for use in 104° F (40°C) ambient temperatures

Thermal Management:

Superior heat sinking with internal Air-Flow fins.

Housing:

Precision die-cast aluminum housing.

Mounting:

Heavy-duty mounting bracket with hinged housing for easy installation.

Recommended Mounting Height:

Up to 14 ft.

Lens:

Tempered glass lens.

Reflector:

Specular thermoplastic.

Gaskets:

High-temperature silicone

Finish:

Formulated for high-durability and long lasting color.

Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

LED Characteristics

LED:

Multi-chip, long-life LED.

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines for the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78 377-2015.

Other

California Title 24:

SLIM18 complies with 2013 California Title 24 building and electrical codes as a residential outdoor fixture. See SLIM18/PC for a model that complies as a commercial outdoor non-pole-mounted fixture ≤ 30 Watts.

Patents:

The design of the SLIM™ is protected by patents in U.S. Pat D681,864, and pending patents in Canada, China, Taiwan and Mexico.

Technical Specifications (continued)
Other
Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

HID Replacement Range:

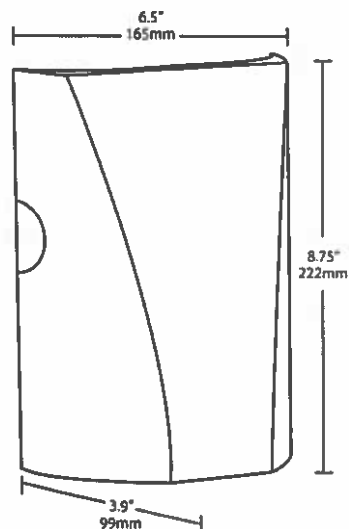
Replaces 100W Metal Halide.

Optical
BUG Rating:

B1 U0 G0

BUG Rating:

B1 U0 G0

Dimensions

Features

Full cutoff, fully shielded LED wallpack

Can be used as a downlight or uplight

Contractor friendly features for easy installation

100,000-hour LED Life

5-Year Warranty

Ordering Matrix

Family	Watts	Color Temp	Finish	Photocell	Dimming
SLIM					
	26 = 26W	Blank = 5000K (Cool)	Blank = Bronze	Blank = No Photocell	Blank = No Dimming
	18 = 18W	Y = 3000K (Warm)	W = White	/PC = 120V Button	/D10 = Dimmable
	12 = 12W	N = 4000K (Neutral)		/PC2 = 277V Button	
				/PCT = 120-277V Twistlock	

SLIM12N/D10



12, 18 and 26 Watt SLIM wallpacks are ultra efficient and deliver impressive light distribution with a compact low-profile design that's super easy to install as a downlight or uplight.

Color: Bronze

Weight: 4.5 lbs

Project:
Hall High School

Type:
K

Prepared By:
A. Murphy

Date:
05/03/17

Driver Info

Type: Constant Current
120V: 0.12A
208V: 0.08A
240V: 0.07A
277V: 0.06A
Input Watts: 14W
Efficiency: 86%

LED Info

Watts: 12W
Color Temp: 4000K
Color Accuracy: 71 CRI
L70 Lifespan: 100000
Lumens: 1,884
Efficacy: 136 LPW

Technical Specifications

Electrical

Dimming Driver:

Driver includes dimming control for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims as low as 5%.

Driver:

Constant Current, Class 2, 100-277V, 50/60 Hz., 4KV surge protection, 350mA, 100-240VAC 0.3-0.15 Amps, 277VAC 0.15Amps, Power Factor 99%.

Listings

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities.

DLC Product Code: PKURTMUN

UL Listing:

Suitable for wet locations. Suitable for mounting within 1.2m (4ft) of the ground.

ADA Compliant:

SLIM™ is ADA Compliant.

Dark Sky Approved:

The International Dark Sky Association has approved this product as a full cutoff, fully shielded luminaire.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

Construction

IP Rating:

Ingress Protection rating of IP66 for dust and water

Cold Weather Starting:

Minimum starting temperature is -40° F (-40° C)

Maximum Ambient Temperature:

Suitable for use in 104° F (40°C) ambient temperatures

Thermal Management:

Superior heat sinking with internal Air-Flow fins.

Housing:

Precision die-cast aluminum housing.

Mounting:

Heavy-duty mounting bracket with hinged housing for easy installation.

Recommended Mounting Height:

Up to 8 ft.

Lens:

Tempered glass lens.

Reflector:

Specular thermoplastic.

Gaskets:

High-temperature silicone

Finish:

Formulated for high-durability and long lasting color.

Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

LED Characteristics

LED:

Multi-chip, long-life LED.

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines for the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2015.

Other

California Title 24:

SLIM12 complies with 2013 California Title 24 building and electrical codes as a residential outdoor fixture. See SLIM12/PC for a model that complies as a commercial outdoor non-pole-mounted fixture ≤ 30 Watts.

Patents:

The design of the SLIM™ is protected by patents in U.S. Pat D681,864, and pending patents in Canada, China, Taiwan and Mexico.

Technical Specifications (continued)
Other
Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

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GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

HID Replacement Range:

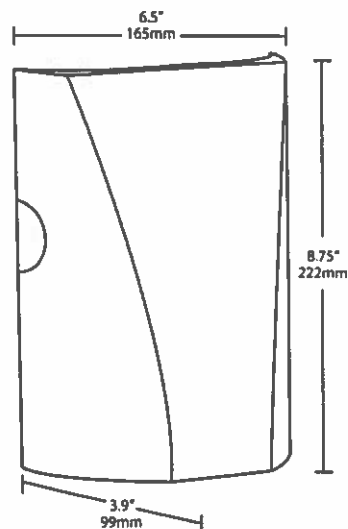
Replaces 70W Metal Halide.

Optical
BUG Rating:

B1 U0 G0

BUG Rating:

B1 U0 G0

Dimensions

Features

- Full cutoff, fully shielded LED wallpack
- Can be used as a downlight or uplight
- Contractor friendly features for easy installation
- 100,000-hour LED Life
- 5-Year Warranty

Ordering Matrix

Family	Watts	Color Temp	Finish	Photocell	Dimming
SLIM	26 = 26W 18 = 18W 12 = 12W	Blank = 5000K (Cool) Y = 3000K (Warm) N = 4000K (Neutral)	Blank = Bronze W = White	Blank = No Photocell /PC = 120V Button /PC2 = 277V Button /PCT = 120-277V Tristock	Blank = No Dimming /D10 = Dimmable

